BOOK REVIEWS

ELECTROCARDIOGRAPHY—Fundamentals and Clinical Application. By Louis Wolff, M.D., Associate in Medicine, Harvard Medical School. W. B. Saunders Company, Philadelphia, 1950.

This relatively brief book on electrocardiography is a very clear and concise discussion of the present concepts of the subject. In brief but adequate manner the author has outlined the basic principles of the electrical phenomena associated with muscle contraction. The first few chapters discuss the dipole theory, volume conductors, intrinsicoid deflections, vectors, primary and secondary T wave changes and in general prepare the reader to approach electrocardiography from the physiologic, rather than the empiric point of view.

In the section on clinical electrocardiography there is an excellent balance and restraint, and the author very properly cautions against diagnosis without adequate evidence. He discusses electrocardiography perhaps too simply, in that only the well-developed patterns are described. The large mass of early patterns and developing patterns is inadequately discussed.

A few sections in which the reviewer disagrees with the author may be cited:

On page 88 the author gives a figure of 0.02 seconds as the maximum intrinsicoid deflection in V_1 and 0.035 seconds as the maximum in V_6. These upper limits are too short and should be increased to 0.035 for V_1 and 0.05 for V_6. On page 89 the author states that the normal QRS interval usually does not exceed 0.08 seconds. Most electrocardiographers would certainly admit that many normal subjects have QRS intervals exceeding this figure.

The problem of incomplete right bundle branch block is not clearly discussed. At times the author states that the presence of R′ in V_1 is unimportant as long as the QRS is within normal limits; at other times he suggests incomplete right bundle branch block. Of course, there is no fundamental agreement even among electrocardiographers on this point. On page 96, in the discussion of bundle branch block, the author states that "Q waves in left ventricular curves of right bundle branch block probably indicate disease of the I-V septum." He does not clearly indicate, as has been shown by Wilson and his co-workers, that the presence of a Q wave in left precordial leads in a record resembling left bundle branch block is usually associated with myocardial infarction. In Figure 41 the interpretation is given as "left ventricular hypertrophy," but the deeply inverted T wave in AVF in association with a horizontal heart should make one wonder about posterior infarction, and esophageal leads would have been helpful.

In the discussion of left ventricular hypertrophy the author tabulates "Q waves common in V_6" as one of the signs of left ventricular hypertrophy (page 109). He does not clearly state that Q waves are also common in normals.

In the discussion on right ventricular hypertrophy (page 119) the author states that diagnostic is the fact that the intrinsic deflection occurs later in V_1 than in V_6. This is misleading and not always true. The intrinsic deflection is usually delayed in V_1 but does not necessarily occur later than that in V_6. In Figure 53 a diagnosis of right ventricular hypertrophy was made on the basis of a deep S in V_6. The author did not discuss the possibility that the transitional zone was displaced further to the left in V_6 in view of the normal appearing QRS complex in AVF, in the presence of a vertical heart. The record suggests incomplete right bundle branch block.

In the section on coronary heart disease, the only criticism is the fact that the author is unwilling to make a diagnosis of myocardial infarction on serial T wave changes. In Figures 59 and 60 for example, progressive T wave changes of characteristic contour without significant QRS changes were described. While it is true that one should hesitate to make a diagnosis of myocardial infarction in the absence of QRS changes, one should be prepared to make the diagnosis when the typical evolutionary waxing and waning occurs with T waves of typical contour.

In the section on pericarditis most electrocardiographers would disagree with the author that Figure 96 is due to acute pericarditis and not due to myocardial infarction. The clinical fact that the patient had repetitive episodes of constricting chest pain over an 18-month period is also very difficult to explain on the basis of pericarditis.

In the section on pulmonary embolism, the changes shown in Figure 97 are too minor to be described as diagnostic of cor pulmonale. The illustrations of Figures 98-101 are much more representative and Figure 97 should be deleted.

Despite the above points of difference, Wolff's book is an excellent elementary text for the student, general practitioner or internist who is not familiar with unipolar leads and the modern electrophysiological concepts of electrocardiography. The clarity, style and excellence of the illustrations make the book easily readable. The book can be highly recommended.

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1949 YEAR BOOK OF OBSTETRICS AND GYNECOLOGY. Edited by J. P. Greenhill, M.D. The Year Book Publishers, Inc. $4.50.

No treatise on obstetrics and gynecology can give the practicing physician a more complete summary of what is new and what is effective than the 1949 Year Book edited by J. P. Greenhill, M.D. The comments are fair criticism and offer evidence that personal opinions alone are not expressed in these interesting paragraphs.

The ability to summarize the many long articles which have appeared during the year makes the Year Book a ready reference to the latest and best.

The discussions of erythroblastosis, genital prolapse and the problems of malignancy deserve special mention. Endocrinology is again presented in a sensible and complete review without the unwarranted enthusiasm of many of the authors. Again, Greenhill's book can be recommended as the review of reviews in obstetrics and gynecology.

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A STORY OF NUTRITIONAL RESEARCH—The Effect of Some Dietary Factors on Bones and the Nervous System. By Sir Edward Mellanby, G.B.E., M.D., Sc.D., Secretary of the British Medical Research Council. The Williams and Wilkins Company, Baltimore, 1950. $5.00.

Mellanby's Flexner Lectures, delivered at Vanderbilt University, constitute a ponderous story of one aspect of the problem of research in nutrition, namely the rachitogenic features of certain artificial diets. The volume presents a detailed protocol of experimental work dealing with the effects upon the nervous system and the osseous system of the accessory food factors, vitamin A, calcium, phosphorus, phytic acid, phytase and the anticalcifying substance in cereals. The problem of vitamin A deficiency and its relation to nerve degeneration and muscular incoordination in laboratory animals (rabbits, dogs, ferrets, rats, chickens,